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CLAIMS

1. A vaccine composition comprising:
 - (a) a hepatitis B viral (HBV) antigen; and
 - 5 (b) a human papillomavirus (HPV) antigenin conjunction with an adjuvant which is a preferential stimulator of TH1 cell response.
- 10 2. A vaccine composition according to claim 1 which additionally comprises a carrier.
3. A vaccine composition according to claim 1 or claim 2 in which the preferential stimulator of TH1-cell response is selected from the group of adjuvants comprising: 3D-MPL, 3D-MPL wherein the size of the particles of 3D-MPL is
15 preferably about or less than 100nm, QS21, a mixture of QS21 and cholesterol, and a CpG oligonucleotide.
4. A vaccine composition according to claim 3 in which the preferential stimulator of TH1-cell response is 3D-MPL.
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5. A vaccine composition according to any one of claims 1 to 4 in which the Hepatitis B antigen is hepatitis B surface antigen.
6. A vaccine composition according to any one of claims 1 to 5 which
25 comprises at least one HPV antigen selected from the group consisting of L1, L2, E6 and E7, optionally in the form of a fusion protein or a truncate.
7. A vaccine composition according to any one of claims 1 to 6 in which an EBV antigen is additionally present.
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8. A vaccine composition as defined in claim 7 in which the EBV antigen is gp 350.

9. A vaccine composition according to any one of claims 1 to 6 in which a hepatitis A antigen is additionally present.
- 5 10. A vaccine composition according to claim 9 in which the HAV antigen is derived from the HM-175 strain.
11. A vaccine composition according to any one of claims 1 to 6 in which a herpes simplex virus (HSV) antigen is additionally present.
- 10 12. A vaccine composition according to claim 11 in which the HSV antigen is HSV-2 gD or a truncate thereof.
13. A vaccine composition according to any one of claims 1 to 12 in which the carrier is selected from the group comprising aluminium hydroxide, aluminium phosphate and tocopherol and an oil in water emulsion.
- 15 14. A vaccine composition according to any one of claims 1 to 13 which additionally comprises a VZV antigen.
- 20 15. A vaccine composition according to claim 14 in which the VZV antigen is gPI.
16. A vaccine composition according to any one of claims 1 to 15 which additionally comprises a HCMV antigen.
- 25 17. A vaccine composition according to claim 16 in which the HCMV antigen is gB685** or pp65.
- 30 18. A vaccine composition according to any one of claims 1 to 17 which additionally comprises a *Toxoplasma gondii* antigen.

19. A vaccine composition according to claim 18 in which the *Toxoplasma gondii* antigen is SAG1 or TG34.

20. A vaccine composition according to any one of claims 1 to 4 comprising
5 HBsAg S antigen and L1, L2, E6, E7, protein D-E6, protein D-E7 or L2-E7 of HPV and optionally in addition one or more of HSV-2 gDt; EBVgp 350; VZVgpl; HAV HM-175 inactivated strain; gB685** or pp65 of HCMV and SAG1 or TG34 antigens of *Toxoplasma gondii*.

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CLAIMS

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1. A vaccine composition comprising:
 - (a) a hepatitis B viral (HBV) antigen; and
 - 5 (b) a human papillomavirus (HPV) antigenin conjunction with an adjuvant which is a preferential stimulator of TH1 cell response wherein the vaccine composition does not comprise a herpes simplex viral antigen.
- 10 2. A vaccine composition according to claim 1 which additionally comprises a carrier.
3. A vaccine composition according to claim 1 or claim 2 in which the preferential stimulator of TH1-cell response is selected from the group of adjuvants
15 comprising: 3D-MPL, 3D-MPL wherein the size of the particles of 3D-MPL is preferably about or less than 100nm, QS21, a mixture of QS21 and cholesterol, and a CpG oligonucleotide.
4. A vaccine composition according to claim 3 in which the preferential
20 stimulator of TH1-cell response is 3D-MPL.
5. A vaccine composition according to any one of claims 1 to 4 in which the Hepatitis B antigen is hepatitis B surface antigen.
- 25 6. A vaccine composition according to any one of claims 1 to 5 which comprises at least one HPV antigen selected from the group consisting of L1, L2, E6 and E7, optionally in the form of a fusion protein or a truncate.
7. A vaccine composition according to any one of claims 1 to 6 in which an
30 EBV antigen is additionally present.

8. A vaccine composition as defined in claim 7 in which the EBV antigen is gp 350.
9. A vaccine composition according to any one of claims 1 to 6 in which a hepatitis A antigen is additionally present.
10. A vaccine composition according to claim 9 in which the HAV antigen is derived from the HM-175 strain.
11. A vaccine composition according to any one of claims 1 to 10 in which the carrier is selected from the group comprising aluminum hydroxide, aluminum phosphate and tocopherol and an oil in water emulsion.
12. A vaccine composition according to any one of claims 1 to 11 which additionally comprises a VZV antigen.
13. A vaccine composition according to claim 12 in which the VZV antigen is gpI.
14. A vaccine composition according to any one of claims 1 to 13 which additionally comprises a HCMV antigen.
15. A vaccine composition according to claim 14 in which the HCMV antigen is gB685** or pp65.
16. A vaccine composition according to any one of claims 1 to 15 which additionally comprises a *Toxoplasma gondii* antigen.
17. A vaccine composition according to claim 16 in which the *Toxoplasma gondii* antigen is SAG1 or TG34.

18. ~~A vaccine composition according to any one of claims 1 to 4 comprising HBsAg S antigen and L1, L2, E6, E7, protein D-E6, protein D-E7 or L2-E7 of HPV and optionally in addition one or more of EBVgp 350; VZVgpI; HAV HM-175 inactivated strain; gB685** or pp65 of HCMV and SAG1 or TG34 antigens of~~
- 5 *Toxoplasma gondii*.

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